responsible for an enormous burden of disease in the region. This evidence-based, internally and externally valid HEM showed to be an adequate tool for the assessment of the effects of smoking and could be a useful policy-making tool to estimate the cost-effectiveness of tobacco control interventions.

PRS7

CUSTOS DE PNEUMONIAS HOSPITALIZADAS NO BRASIL: ANÁLISE COMPARATIVA POR DIFERENTES MÉTODOS DE CUSTEIO

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OBJETIVOS: Comparar os custos do tratamento de crianças hospitalizadas por pneumonia bacteriana adquirida na comunidade, considerando diferentes metodologias de custeio. **MÉTODOS:** Estudo prospectivo realizado em Goiânia, Goiás/Brasil. Crianças com 28 dias a 35 meses internadas em 2 hospitais foram avaliadas. Três metodologias de custeio foram consideradas na perspectiva do Sistema Único de Saúde: (i) *bottom-up/micro-costing* através da revisão de prontuários; (ii) *top-down/micro-costing* através de diretriz terapêutica; e (iii) *top-down/gross-costing* através de ressarcimento pago pelo SUS. Casos foram pacientes internados com suspeita clínica de pneumonia, receberam antibioticoterapia durante a internação e não tiveram diagnóstico final de pneumonia viral. Casos graves foram aqueles internados em enfermaria enquanto os internados em unidade de terapia intensiva foram considerados muito graves. Foram considerados custos diretos (medicamentos, honorários médicos e de fisioterapia respiratória, exames e diárias hospitalares em UTI e enfermaria) e não-médicos (diárias de acompanhantes). Os custos foram estimados em dólares americanos (USD) e reais (R$) considerando a taxa de câmbio oficial (1 USD = R$ 1,875) em dezembro de 2011. O teste de Friedman foi utilizado para comparar os resultados. **RESULTADOS:** Foram analisados 59 casos (52 graves e 7 muito graves). Os custos de casos graves foram R$ 781 (USD 416) por *bottom-up/micro-costing*, R$ 641 (USD 342) por *top-down/micro-costing* e R$ 597 (USD 318) por *top-down/gross-costing* ($p=0,015$). Para os casos muito graves, os custos foram R$ 3.539 (USD 1.887) por *bottom-up/micro-costing*, R$ 3.369 (USD 1.796) por *top-down/micro-costing* e R$ 3.175 (USD 1.693) por *top-down/gross-costing* (p=0,018). Para ambos os grupos, houve diferença significativa apenas entre *bottom-up/microcosting e top-down/gross-costing*. **CONCLUSÕES:** Nossos resultados sugerem a estimativa de custos por *top-down/micro-costing* através de diretriz terapêutica pode ser uma alternativa que se aproxima à estimativa considerando o *bottom-up/microcosting* através de revisão de prontuários, considerado o padrão ouro para estimativa de custos de doença.

PRS8

EFFECTIVENESS AND COST ANALYSIS OF THE SMOKING CESSATION PROGRAM IN THE PUBLIC HEALTH SYSTEM IN BRAZIL

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OBJECTIVES: To assess the effectiveness and costs of the Smoking Cessation Program (SCP) in the Public Unified Health System (SUS) and to estimate the cost for its full implementation in the city of Goiânia, Brazil. **METHODS:** The SCP intervention targets group of smokers, and includes medical visits, cognitive-behavioral group therapy, and medication use, lasting six months. Costs for SCP intervention and management were estimated. The SCP full implementation was defined as the program's expansion to meet the demand of all smokers motivated to quit smoking in the city of Goiânia. Direct medical and non-medical direct costs were considered, including staff, medications, consumables, general expenses, transportation, travel, events and capital costs. Microcosting and activity-based costing methods were used. Cost for the federal, state and municipal levels were estimated. The SUS perspective was considered. Two-way sensitivity analysis was conducted. Data sources included a convenience sample of primary health facilities, municipal and state health departments, and the Ministry of Health. Costs were estimated in Reais (R$) and U.S. Dollars (USD), considering the exchange rate of December/2010, which was 1.67. Quitting rates were estimated as the percentage of patients who reported not smoking at the end of the intervention. Costs of the SCP are presented as total cost of the intervention; costs stratified by component and level of funding source; cost per patient; and cost per quitter. **RESULTS:** The average quitting rate was 37.2%. The cost of SCP in Goiânia was R$428,580 (US$257,220), of which 23% were program management costs. Cost per patient was R$534 (US$320) and cost per quitter was R$1,433 (US$860). The SCP's full implementation reaching the estimated 37,455 smokers in Goiânia motivated to quit would cost R$21.5 million (US$13). **CONCLUSIONS:** The SCP is highly effective. Additional efficiency could be gained by expanding patient's access to the program.

PRS11

CLINICAL AND ECONOMIC ANALYSIS OF MOMETASONE FUROATE NASAL SPRAY IN THE TREATMENT OF RHINOSINUSITIS IN MEXICO

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OBJECTIVES: Little information exists on the acute treatment provided for rhinosinusitis and its associated costs. We hypothesize that introducing the administration of mometasone furoate (MFNS) as a treatment for rhinosinusitis will have a substantial impact on medical resource costs, outcomes and possibly cost-effectiveness. The goal of this paper is to estimate the cost-effectiveness of treating patients with rhinosinusitis with MFNS versus amoxicillin. **METHODS:** A decision-analytic model was developed to estimate lifetime costs and outcomes associated with MFNS 200µg twice daily and amoxicillin 500mg three times daily in treating rhinosinusitis from the Mexican health care perspective. This study further do not included MFNS 200µg once daily as a treatment arm because it was not found to be superior to amoxicillin. Data sources included published literature, clinical trials, official price/tariff lists, and Delphi panel data. The time horizon was 2 weeks. The effectiveness outcomes of the study were modeled as changes in the Major Symptom Score (MSS). MSS consists of five questions concerning rhinorrhoea, post-nasal drip, nasal congestion, sinus headache, and facial pain. Costs were valued in US dollar, year 2012 values. Multiple 1-way sensitivity analyses and a probabilistic sensitivity analysis using Monte Carlo simulation were performed to handle uncertainty. **RESULTS:** The projected costs were US$ 258 with MFNS and $US 272 with. The benefits (changes in the MSS) were 0.52 with MFNS 0.45 with Amoxicilin. MFNS was associated with a cost savings per patient of US$ 14 versus amoxicillin over a period of 2 weeks from a health care perspective. The incremental cost-effectiveness ratio for MFNS dominated Amoxicilin. Sensitivity analysis confirmed the overall cost savings and gains in effectiveness. **CONCLUSIONS:** Our analysis suggests MFNS improves health outcomes in a cost-effective manner compared with Amoxicilin. The economic value of Amoxicillin is influenced by difficulties involved in diagnosing the condition, effectiveness, resistance, patient compliance with treatment, and treatment failure associated with antibiotics.

RESPIRATORY-RELATED DISORDERS – Health Care Use & Policy Studies

PRS12

THE IMPACT OF PUBLIC FORMULARIES & GUIDELINES ON COMMUNITY ACQUIRED PNEUMONIA (CAP) DRUGS IN MEXICO

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OBJECTIVES: Pharmaceutical spending in Mexico represents approximately 25% of total health expenditures, with this number expected to grow by 14% from 2009-2014. 90% of Mexico's population receives health care from the public health system or Popular Health Insurance (PHI). A private insurance market has begun to take root. This study looks at how the increase in price controls and guidelines may impact access to newly approved Community Acquired Pneumonia (CAP) drugs. **METHODS:** An array of published data such as pricing process, current policies, sector-specific research articles contributed towards a framework to understand the key factors affecting access to CAPs drugs, were gathered. The data then informed a telephone survey of national and regional health care stakeholders (N=6). **RESULTS:** Findings show that in Mexico: 1) New pressures through price negotiations are occurring due to economic challenges facing PHI; 2) Private purchasing of pharmaceutical products represents 56% of sold units worth 79% of total spend versus public purchase representing 44% of sold units and 21% of total spend; 3) Formularies used by public coverage schemes require newly approved drugs for CAP to achieve marketing authorization, meet safety requirements and be cost effective versus comparator agents; and 4) International reference price serves as a benchmark for establishing a price threshold. **CONCLUSIONS:** Drugs used to treat CAP are compared to comparator agents based on cost effectiveness. This will determine placement in the public formulary. The private pharmaceutical market may use data from the public formulary system when making a determination on price. Existing clinical guidelines in the public sector are non-binding, leaving the final decision on use to physicians. However, patient access to drugs for CAP may be impacted based on price negotiations and cost effectiveness analysis.

PRS13

ASSESSMENT OF THE PERCEPTION AND PRACTICES WITH RESPECT TO ANTIBIOTIC USAGE IN PUBLIC THROUGH SOCIAL MEDIA

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OBJECTIVES: To assess the knowledge, perception and practices with respect to antibiotic usage amongst the Indian population with an aim to sensitize the survey participants about the consequences of misuse of antibiotics. **METHODS:** A questionnaire was designed around the use, misuse and consequences of antibiotic resistance based on latest National Policy for Antimicrobial Resistance of India. The survey was conducted using social media sites like facebook, twitter etc. The responses collected were classified as geographical locations, gender, age and occupation. Survey is designed in such a way that all the prevailing practices and views of the general public with respect to antibiotic usage are covered. **RESULTS:** The prescription for antibiotic was 25% for common cold. Empirical antibiotic prescription was reported for 61% of the respondents. 14% preferred for a diagnostic test for guiding antibiotic prescription by doctors. 50% of the respondents preferred to purchase antibiotics directly from the chemist shops without the prescription of a doctor. Almost half of the respondents were not aware about the antibiotic resistance development due to environmental contamination. 35% of the respondents affirmed to stopping the antibiotic regimen as soon as their symptoms subsided. **CONCLUSIONS:** The antibiotic resistance is a global phenomenon requiring the immediate reforms to curb as the danger of multi-drug resistant bacteria is a ticking time bomb. Our results have clearly indicated the misuse of antibiotics by public and practitioners which needs to be monitored and corrected immediately to prevent the catastrophe of epidemics by MDR bacteria as the new antibiotics are not invented and old drugs are becoming ineffective.